

WHAT IS CLAIMED IS:

1. A fixing member that heat bonds a toner on a recording material by heating, comprising:

5 a releasing layer, a layer of elastic material, below the releasing layer, and a layer of adiabatic and hygroscopic material, below the layer of elastic material, wherein the layer of elastic material includes
a layer of electrically conducting material to pass electric currents,
an adiabatic, elastic, and hydrophobic material, and
10 a porous material to the release of the moisture absorbed by the layer of adiabatic and hygroscopic material.

2. The fixing member according to claim 1, wherein the porous material is made of a plurality of hollow fibers made of a hygroscopic
15 heat-resistant material and the adiabatic, elastic, and hydrophobic material is a binder, and the layer of electrically conducting material is disposed around the hollow fibers.

3. The fixing member according to claim 1, wherein the porous
20 material of the layer of elastic material is deposited on the layer of adiabatic and hygroscopic material such that there are empty spaces between the porous material and the layer of adiabatic and hygroscopic material, and the layer of electrically conducting material is disposed on the porous material.

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4. The fixing member according to claim 1, wherein the layer of electrically conducting material is chemically coupled with at least one of the layers adjoining the conductive layer.

5 5. The fixing member according to claim 1, comprising as a single unit a primary coil and a secondary coil that is magnetically coupled with the primary coil, wherein induction current produced by the secondary coil flows through the layer of electrically conducting material.

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6. A fixing member that heat bonds a toner on a recording material by heating, comprising:

a releasing layer;

a first layer of adiabatic and hydrophobic material, below the

15 releasing layer;

a layer of electrically conducting material, below the first layer, to pass electric currents; and

a second layer of adiabatic and hydrophobic material, below the layer of electrically conducting material, wherein at least one of the first
20 layer and the second layer is made of elastic material.

7. The fixing member according to claim 6, wherein the releasing layer is made of a fluorocarbon resin and the second layer is made of rubber.

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8. The fixing member according to claim 6, wherein the first layer and the second layer are made of rubber, and a deformation of the first layer and the second layer is 10% or less.
- 5 9. The fixing member according to claim 6, wherein the layer of electrically conducting material is chemically coupled with at least one of the layers adjoining the conductive layer.
- 10 10. The fixing member according to claim 6, comprising as a single unit a primary coil and a secondary coil that is magnetically coupled with the primary coil, wherein induction current produced by the secondary coil flows through the layer of electrically conducting material.
- 15 11. A fixing device comprising a fixing member and a pressure member made of an air-containing adiabatic material, wherein the fixing member heat bonds a toner on a recording material by heating and includes
- 20 a releasing layer, a layer of elastic material, below the releasing layer, and a layer of adiabatic and hygroscopic material, below the layer of elastic material, wherein the layer of elastic material includes
- a layer of electrically conducting material to pass electric currents,
- 25 an adiabatic, elastic, and hydrophobic material, and a porous material to the release of the moisture

absorbed by the layer of adiabatic and hygroscopic material..

12. A fixing device comprising a fixing member and a pressure member made of an air-containing adiabatic material, wherein the fixing member heat bonds a toner on a recording material by heating and includes

a releasing layer;

a first layer of adiabatic and hydrophobic material, below the releasing layer;

10 a layer of electrically conducting material, below the first layer, to pass electric currents; and

a second layer of adiabatic and hydrophobic material, below the layer of electrically conducting material, wherein at least one of the first layer and the second layer is made of elastic material.

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13. An image forming apparatus comprising a fixing member that heat bonds a toner on a recording material by heating, the fixing member includes

20 a releasing layer, a layer of elastic material, below the releasing layer, and a layer of adiabatic and hygroscopic material, below the layer of elastic material, wherein the layer of elastic material includes

a layer of electrically conducting material to pass electric currents,

an adiabatic, elastic, and hydrophobic material, and

25 a porous material to the release of the moisture

absorbed by the layer of adiabatic and hygroscopic material.

14. An image forming apparatus comprising a fixing member that heat bonds a toner on a recording material by heating, the fixing member includes
- 5 a releasing layer;
 - a first layer of adiabatic and hydrophobic material, below the releasing layer;
 - a layer of electrically conducting material, below the first layer,
 - 10 to pass electric currents; and
 - a second layer of adiabatic and hydrophobic material, below the layer of electrically conducting material, wherein at least one of the first layer and the second layer is made of elastic material.